

PENDING CLAIMS AS AMENDED

1-30. (Canceled)

31. (Previously Presented) A mobile station operable to communicate wirelessly with a base station, the mobile station comprising:

a processor configured to select an access channel; and

a mobile termination block configured to (a) transmit a pilot preamble and a traffic channel request to a base station on the selected access channel, the traffic channel request comprising a mobile station identifier, and (b) transmit data on a traffic channel identified by the mobile station identifier to the base station without waiting to receive a traffic channel assignment from the base station.

32. (Previously Presented) The mobile station of claim 31, wherein the processor is further configured to (a) determine which base station is sending a pilot signal which is stronger than any other pilot signal received by the mobile station and (b) select an access channel to send the a pilot preamble and traffic channel request to the determined base station.

33. (Previously Presented) The mobile station of claim 31, wherein the processor is configured to randomly select the access channel from a plurality of access channels.

34. (Previously Presented) The mobile station of claim 31, wherein the processor is configured to select the access channel from a list of access channels advertised by the base station.

35. (Previously Presented) The mobile station of claim 31, wherein the pilot preamble and traffic channel request are masked with a long code access channel cover.

36. (Previously Presented) The mobile station of claim 31, wherein the pilot preamble comprises a sequence of data that is detectable by the base station.

37. (Previously Presented) The mobile station of claim 31, wherein the mobile station is configured to register with a wireless system comprising the base station, the wireless system assigning the mobile station identifier and sending the mobile station identifier to the mobile station.

38. (Previously Presented) The mobile station of claim 31, wherein the traffic channel request further comprises a transaction identifier, a reference pilot, a pilot strength indicator, and a timer status field.

39. (Previously Presented) The mobile station of claim 31, wherein the traffic channel request further comprises signal strengths and identities of all base stations having received signal strengths exceeding a threshold.

40. (Previously Presented) The mobile station of claim 31, wherein the mobile termination block is further configured to transmit a data request channel (DRC) on the traffic channel after transmitting the pilot preamble and traffic channel request on the access channel.

41. (Previously Presented) The mobile station of Claim 40, wherein the data request channel (DRC) is masked with a long code comprising a mobile station identifier (MSI) cover.

42. (Previously Presented) The mobile station of Claim 40, wherein the DRC comprises traffic channel data rate information usable by the mobile station to request a maximum data rate from the base station with which the mobile station can reliably demodulate data.

43. (Previously Presented) The mobile station of claim 31, wherein the mobile station is configured to continue transmitting the DRC for a pre-defined time period.

44. (Previously Presented) The mobile station of claim 31, wherein the mobile termination block is further configured to transmit pilot channel information on the traffic channel after transmitting the pilot preamble and traffic channel request on the access channel.

45. (Previously Presented) The mobile station of Claim 44, wherein the pilot channel information is masked with a long code comprising a mobile station identifier (MSI) cover.

46. (Previously Presented) The mobile station of claim 31, further comprising a receiver configured to receive a traffic channel assignment message transmitted by the base station.

47. (Previously Presented) The mobile station of claim 31, wherein the mobile termination block is configured to use Code Division Multiple Access (CDMA) to process data for transmission to the base station.

48. (Previously Presented) The mobile station of claim 31, wherein the mobile termination block is configured to transmit a sequence of pilot preambles and traffic channel requests with increasing power until the traffic channel request is acknowledged by the base station or the sequence ends.

49. (Previously Presented) The mobile station of claim 31, wherein the processor is further configured to select a power control group from a plurality of power control groups for the mobile termination block to transmit data.

50. (Withdrawn) A base station operable to communicate wirelessly with a mobile station, the base station comprising:

a processor configured to randomly generate a number for a mobile station identifier when a communication session is opened between the mobile station and a wireless communication system comprising the base station; and

a transceiver configured to (a) receive a pilot preamble and a traffic channel request from the mobile station on an access channel, the traffic channel request comprising the mobile station identifier, (b) receive data from the mobile station on a traffic channel identified by the mobile station identifier, and (c) transmit a traffic channel assignment to the mobile station.

51. (Withdrawn) The base station of claim 50, wherein the transceiver is configured to transmit the traffic channel assignment message to the mobile station using a forward link traffic channel.

52. (Withdrawn) The base station of claim 50, wherein the processor is configured to de-assign the randomly generated mobile station identifier number when the session terminates.

1. (Withdrawn) The base station of claim 50, wherein the transceiver is configured to transmit a group of available power control sub-channels to the mobile station for the mobile station to select one for use in subsequent communications with the base station.

53. (Withdrawn) The base station of claim 50, wherein the transceiver is configured to transmit a list of available traffic channels and associated available power control sub-channels to the mobile station for the mobile station to use in subsequent communications with the base station.

54. (Previously Presented) An apparatus comprising:
a mobile termination block configured to receive page messages via a control channel sent by at least one base station; and
a processor configured to (a) determine whether one of the page messages is addressed to the apparatus, (b) select a reverse link access channel to transmit a traffic channel request whenever the processor determines a page message is addressed to the apparatus, wherein the mobile termination block is configured to transmit the traffic channel request to a base station using the selected reverse link access channel and transmit data on a traffic channel identified by a mobile station identifier before receiving a channel assignment from the base station.

55. (Previously Presented) The apparatus of claim 54, wherein the mobile termination block further transmits a pilot preamble along with the traffic channel request to a base station using the selected reverse link access channel.

56. (Previously Presented) The apparatus of claim 54, wherein the data transmitted on a traffic channel identified by a mobile station identifier comprises a data request channel (DRC) field.

57. (Previously Presented) The apparatus of claim 54, wherein the processor selects one of a group of advertised available power control sub-channels for communicating with the base station.

58. (Previously Presented) The apparatus of claim 54, wherein the processor selects a traffic channel from list of advertised available traffic channels and associated available power control sub-channels for communicating with the base station.

59. (Previously Presented) A mobile station operable to communicate wirelessly with a base station, the mobile station comprising:

means for selecting an access channel; and

means for (a) transmitting a pilot preamble and a traffic channel request to a base station on the selected access channel, the traffic channel request comprising a mobile station identifier, and (b) transmitting data on a traffic channel identified by the mobile station identifier to the base station without waiting to receive a traffic channel assignment from the base station.